In the claims:

1. (Currently amended) A method of ~~controlling removal of~~making a conclusion about a presence or absence of photoresist in openings of a photoresist mask, comprising the steps of obtaining in a scanning electron microscope a video signal of a bottom of an opening of a photoresist mask; ~~and~~ comparing values of the video signal in different points of an image which contains the opening ~~to be controlled~~; and making the conclusion about a presence or absence of photoresist based on the compared values of the video signal in different points of the image which contains the opening.

2. (Currently amended) ~~A method as defined in claim 1~~A method of making a conclusion about a presence or absence of photoresist in openings of a photoresist mask, comprising the steps of obtaining in a scanning electron microscope a video signal of a bottom of an opening of a photoresist mask; and comparing values of the video signal in different points of an image which contains the opening, wherein said comparing includes selecting a portion of a field of vision outside of an image of the opening; determining a mean value of the video signal and a mean square amplitude of noise on the selected portion; subdividing the image of the bottom of the

opening into fragments; repeating calculations of a mean signal in each fragment; calculating paired differences of average values of the signal; selecting those paired differences which exceed a threshold; and making a conclusion about a presence or absence of ~~non-remote~~non-removed photoresist with determination of borders of the islands.

3. (Original) A method as defined in claim 2, wherein the selecting the portion of the field of vision outside of the image of the opening is performed with a size of the portion not less than 10 x 10 pixels.

4. (Original) A method as defined in claim 2, wherein determining the mean value of the video signal on the selected portion is performed in accordance with the formula:

$$S_{AVE} = \frac{\sum_{i=1}^{n} S(i)}{n}$$

wherein i is a number of pixel, n is a number of pixels involved in the calculation of the mean signal, and S(i) is an individual value of the video signal.

5. (Original) A method as defined in claim 2, wherein the determining the mean square amplitude of noises N is performed in accordance with the formula:

$$N=\frac{1}{\sqrt{n}}\sqrt{\sum_{i=1}^{n}\left[S(i)-S_{AVE}\right]^{2}}$$

6. (Original) A method as defined in claim 2, wherein the subdividing of the image of the bottom of the opening in the fragment is performed with the selection of the fragments sizes m x m, wherein m is 3-10, and a number of pixels in the fragment is m^2.

7. (Original) A method as defined in claim 2, wherein the calculating of a mean value of the video signal in the fragment is performed in accordance with the formula:

$$SF(1)=\frac{1}{m^2}\sum_{j=1}^{m^2}S(j)$$

8. (Original) A method as defined in claim 2, wherein the repeated calculating a mean signal in each fragment is performed until all fragments cover the image of the bottom of the opening.

9. (Original) A method as defined in claim 2, making a conclusion about presence of islands of non-remote resist by comparison of the paired differences with an expected fluctuations of background

$$FF = 3\frac{N}{m} \cdot$$

10. (Original) A method as defined in claim 1; and further comprising the image obtained in the scan and electron microscope obtaining at a reduced accelerating voltage, in order to increase sensitivity of determination of the non-removed photoresist layer.